

## **FLIP CHIP LIGHT EMITTING DIODE WITH MICROMESAS AND A CONDUCTIVE MESH**

### **Abstract of the Disclosure**

A flip chip light emitting diode (12) includes a light-transmissive substrate (10) with a base semiconducting layer (40) disposed thereupon.. A conductive mesh (18) is disposed on the base semiconducting layer (40) and is in electrically conductive contact therewith. Light-emitting micromesas (30) are disposed in openings (20) of the conductive mesh (18). Each light emitting micromesa (30) has a topmost layer (46) of a second conductivity type that is opposite the first conductivity type. A first conductivity type electrode (14) is disposed on the base semiconducting layer (40) and is in electrical communication with the electrically conductive mesh (18). An insulating layer (60) is disposed over the electrically conductive mesh (18). A second conductivity type electrode layer (24) is disposed over the insulating layer (60) and the light-emitting micromesas (30). the insulating layer (60) insulates the second conductivity type electrode layer (24) from the electrically conductive mesh (18).